

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1653SXS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEX enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 20	EVENTLINE will be removed from STN
NEWS	28	Mar 24	PATDPAFULL now available on STN
NEWS	29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	30	Apr 11	Display formats in DGENE enhanced
NEWS	31	Apr 14	MEDLINE Reload
NEWS	32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	33	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS	34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	35	Apr 28	RDISCLOSURE now available on STN
NEWS	36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	37	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	38	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS	39	May 16	CHEMREACT will be removed from STN
NEWS	40	May 19	Simultaneous left and right truncation added to WSCA
NEWS	41	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	42	Jun 06	Simultaneous left and right truncation added to CBNB

NEWS 43 Jun 06 PASCAL enhanced with additional data

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 18:56:21 ON 18 JUN 2003

=> file caplus medline embase scisearch biosis
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 18:56:53 ON 18 JUN 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 18:56:53 ON 18 JUN 2003

FILE 'EMBASE' ENTERED AT 18:56:53 ON 18 JUN 2003

COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 18:56:53 ON 18 JUN 2003

COPYRIGHT 2003 THOMSON ISI

FILE 'BIOSIS' ENTERED AT 18:56:53 ON 18 JUN 2003

COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

=> s (rosaposin or saposin)

L1 1163 (ROSAPOSIN OR SAPOSIN)

=> s (prosaposin or saposin)

L2 1521 (PROSAPOSIN OR SAPOSIN)

=> l2 and fusogenic

L2 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s l2 and fusogenic

L3 3 L2 AND FUSOGENIC

=> l2 and ((vesicle fusion) or (liposome fusion) or (anionic liposome) or (anionic phospholipid))

L2 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l2 and ((vesicle fusion) or (liposome fusion) or (anionic liposome) or
(anionic phospholipid))
L4 28 L2 AND ((VESICLE FUSION) OR (LIPOSOME FUSION) OR (ANIONIC LIPOS
OME) OR (ANIONIC PHOSPHOLIPID))

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 9 DUP REM L4 (19 DUPLICATES REMOVED)

=> s l5 or l3
L6 11 L5 OR L3

=> s l6 and py<=2000
3 FILES SEARCHED...
L7 6 L6 AND PY<=2000

=> d l7 bib hit

L7 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS
AN 2000:840748 CAPLUS
DN 134:158933
TI Degradation of membrane-bound ganglioside GM1. Stimulation by
bis(monoacylglycero)phosphate and the activator proteins SAP-B and GM2-AP
AU Wilkening, Gundo; Linke, Thomas; Uhlhorn-Dierks, Gunther; Sandhoff, Konrad
CS Kekule Institute for Organic Chemistry and Biochemistry, Bonn, 53121,
Germany
SO Journal of Biological Chemistry (2000), 275(46), 35814-35819
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
SO Journal of Biological Chemistry (2000), 275(46), 35814-35819
CODEN: JBCHA3; ISSN: 0021-9258
AB According to our hypothesis glycosphingolipids of the plasma membrane are
digested after endocytosis as components of intraendosomal and
intralysosomal vesicles and membrane structures. The lysosomal degrdn. of
glycosphingolipids with short oligosaccharide chains by acid exohydrolases
requires small, non-enzymic cofactors, called sphingolipid activator
proteins (SAPs). A total of five activator proteins have been identified
as follows: namely the **saposins** SAP-A, -B, -C, and -D, which are
derived from the single chain SAP-precursor protein (**prosaposin**
), and the GM2 activator protein. A deficiency of **prosaposin**
results in the storage of ceramide and sphingolipids with short
oligosaccharide head groups. The loss of the GM2 activator protein blocks
the degrdn. of the ganglioside GM2. The enzymic hydrolysis of the
ganglioside GM1 is catalyzed by .beta.-galactosidase, a water-sol. acid
exohydrolase. The lack of ganglioside GM1 accumulation in patients
suffering from either **prosaposin** or GM2 activator protein
deficiency has led to the hypothesis that SAPs are not needed for the
hydrolysis of the ganglioside GM1 in vivo. In this study we demonstrate
that an activator protein is required for the enzymic degrdn. of
membrane-bound ganglioside GM1 and that both SAP-B and the GM2 activator
protein significantly enhance the degrdn. of the ganglioside GM1 by acid
.beta.-galactosidase in a liposomal, detergent-free assay system. These
findings offer a possible explanation for the observation that no storage
of the ganglioside GM1 has been obsd. in patients with either isolated
prosaposin or isolated GM2 activator deficiency. We also
demonstrate that **anionic phospholipids** such as
bis(monoacylglycero)phosphate and phosphatidylinositol, which specifically

occur in inner membranes of endosomes and in lysosomes, are essential for the activator-stimulated hydrolysis of the ganglioside GM1. Assays utilizing surface plasmon resonance spectroscopy showed that bis(monoacylglycero)phosphate increases the binding of both .beta.-galactosidase and activator proteins to substrate-carrying membranes.

IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**saposin B**, SAP-B; .beta.-galactosidase degrdn. of membrane-bound ganglioside GM1 is stimulated by bis(monoacylglycero)phosphate and activator proteins SAP-B and GM2-AP)

=> d 17 bib hit 2-6

L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 2000:272811 CAPLUS

DN 133:85956

TI Further studies on the reconstitution of glucosylceramidase activity by Sap C and **anionic phospholipids**

AU Salvioli, R.; Tatti, M.; Ciaffoni, F.; Vaccaro, A. M.

CS Department of Metabolism and Pathological Biochemistry, Istituto Superiore Sanita, Rome, 00161, Italy

SO FEBS Letters (2000), 472(1), 17-21

CODEN: FEBLAL; ISSN: 0014-5793

PB Elsevier Science B.V.

DT Journal

LA English

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Further studies on the reconstitution of glucosylceramidase activity by Sap C and **anionic phospholipids**

SO FEBS Letters (2000), 472(1), 17-21

CODEN: FEBLAL; ISSN: 0014-5793

AB The reconstitution of the activity of the lysosomal enzyme glucosylceramidase requires **anionic phospholipids** and at least one protein factor, **saposin C** (Sap C). We have previously proposed a mechanism for the glucosylceramidase activation [Vaccaro et al. (1993) FEBS Lett. 336, 159-162] which implies that Sap C promotes the assocn. of the enzyme with **anionic phospholipid**-contg. membranes, thus promoting contact between the enzyme and its lipid substrate, glucosylceramide. We have further investigated the properties of Sap C using a fluorescent hydrophobic probe such as 4,4'-dianilino-1,1'-binaphthyl-5,5'-disulfonic acid (bis-ANS). The binding between bis-ANS and Sap C was pH-dependent, indicating that protonation leads to increased exposure of hydrophobic surfaces of Sap C. The interaction of Sap C with membranes, triggered by the development of hydrophobic properties at low pH values, was affected by the content of **anionic phospholipids**, such as phosphatidylserine or phosphatidylinositol, suggesting that **anionic phospholipids** have the potential to modulate the insertion of Sap C in the hydrophobic environment of lysosomal membranes. We previously showed that Sap C and **anionic phospholipids** are both required for the binding of glucosylceramidase to large vesicles. We have presently obsd. that Sap C is able to promote the assocn. of glucosylceramidase with the lipid surface only when **anionic phospholipids** exceed a concn. of 5-10%. This level can be reached by summing lower amts. of individual **anionic phospholipids**, since they have additive effects. The present data extend and refine our model of the mechanism of glucosylceramidase activation and stress the key role of pH, Sap C and **anionic phospholipids** in promoting the interaction of the enzyme with membranes.

ST glucosylceramidase interaction membrane **saposin C**
anionic phospholipid

IT Phospholipids, biological studies.
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (acidic; **saposin C**-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT Membrane, biological
 (bilayer; **saposin C**-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT Protonation
 (biol.; evidence that protonation leads to increased exposure of hydrophobic surfaces in **saposin C**)

IT Glycoproteins, specific or class
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (**saposin C**; **saposin C**-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

IT 37228-64-1, Glucosylceramidase
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (**saposin C**-induced binding of glucosylceramidase to membranes can be modulated by pH and **anionic phospholipid** levels)

L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS

AN 1999:503862 CAPLUS

DN 131:268563

TI Structural and membrane-binding properties of **saposin D**

AU Tatti, Massimo; Salvioli, Rosa; Ciaffoni, Fiorella; Pucci, Piero; Andolfo, Annapaola; Amoresano, Angela; Vaccaro, Anna Maria

CS Laboratoria Metabolismo e Biochimica Patologica, Istituto Superiore Sanita, Rome, 00161, Italy

SO European Journal of Biochemistry (1999), 263(2), 486-494

CODEN: EJBICAI; ISSN: 0014-2956

PB Blackwell Science Ltd.

DT Journal

LA English

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Structural and membrane-binding properties of **saposin D**

SO European Journal of Biochemistry (1999), 263(2), 486-494

CODEN: EJBICAI; ISSN: 0014-2956

AB **Saposin D** is generated together with three similar proteins, **saposins A, B and C**, from a common precursor, called **prosaposin**, in acidic organelles such as late endosomes and lysosomes. Although **saposin D** has been reported to stimulate the enzymic hydrolysis of sphingomyelin and ceramide, its physiol. role has not yet been clearly established. In the present study we examd. structural and membrane-binding properties of **saposin D**. At acidic pH, **saposin D** showed a great affinity for phospholipid membranes contg. an **anionic phospholipid** such as phosphatidylserine or phosphatidic acid. The binding of **saposin D** caused destabilization of the lipid surface and, conversely, the assocn. with the membrane markedly affected the fluorescence properties of **saposin D**. The presence of phosphatidylserine-contg. vesicles greatly enhanced the intrinsic tyrosine fluorescence of **saposin D**, which contains tyrosines but not tryptophan residues. The structural properties of **saposin D** were investigated in detail using advanced MS anal. It was found that the main form of **saposin D**

consists of 80 amino acid residues and that the six cysteine residues are linked in the following order: Cys5-Cys78, Cys8-Cys72 and Cys36-Cys47. The disulfide pattern of **saposin D** is identical with that previously established for two other **saposins**, B and C, which also exhibit a strong affinity for lipids. The common disulfide structure probably has an important role in the interaction of these proteins with membranes. The anal. of the sugar moiety of **saposin D** revealed that the single N-glycosylation site present in the mol. is mainly modified by high-mannose-type structures varying from two to six hexose residues. Deglycosylation had no effect on the interaction of **saposin D** with phospholipid membranes, indicating that the glycosylation site is not related to the lipid-binding site. The assocn. of **saposin D** with membranes was highly dependent on the compn. of the bilayer. Neither ceramide nor sphingomyelin, sphingolipids whose hydrolysis is favored by **saposin D**, promoted its binding, while the presence of an acidic phospholipid such as phosphatidylserine or phosphatidic acid greatly favored the interaction of **saposin D** with vesicles at low pH. These results suggest that, in the acidic organelles where **saposins** are localized, **anionic phospholipids** may be determinants of the **saposin D** topol. and, conversely, **saposin D** may affect the lipid organization of **anionic phospholipid**-contg. membranes.

- ST **saposin D** structure disulfide oligosaccharide phospholipid membrane assocn
- IT Membrane, biological
(bilayer; structural and membrane-binding properties of **saposin D**)
- IT Phospholipids, biological studies
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(bilayer; structural and membrane-binding properties of **saposin D**)
- IT Phosphatidic acids
Phosphatidylserines
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)
(effect of acidic phospholipids in bilayer membrane on **saposin** binding; structural and membrane-binding properties of **saposin D**)
- IT Disulfide group
(localization in **saposin D**; structural and membrane-binding properties of **saposin D**)
- IT Mannooligosaccharides
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(of **saposin D**; structural and membrane-binding properties of **saposin D**)
- IT Glycoproteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(**saposins**, D; structural and membrane-binding properties of **saposin D**)
- IT 52-90-4, L-Cysteine, properties
RL: PRP (Properties)
(identification of Cys residues involved in disulfide pattern of **saposin D**; structural and membrane-binding properties of **saposin D**)
- L7 ANSWER 4 OF 6 SCISEARCH COPYRIGHT 2003 THOMSON ISI
AN 2000:109878 SCISEARCH
GA The Genuine Article (R) Number: 274RR
TI Mechanistic and kinetic studies of **saposin C** induced vesicle fusion
AU Qi X Y (Reprint); Grabowski G A

CS CHILDRENS HOSP RES FDN, CINCINNATI, OH 45229; UNIV CINCINNATI, COLL MED,
CINCINNATI, OH 45229

CYA USA

SO BIOPHYSICAL JOURNAL, (JAN 2000) Vol. 78, No. 1, Part 2, pp.
PO330-PO330.
Publisher: BIOPHYSICAL SOCIETY, 9650 ROCKVILLE PIKE, BETHESDA, MD
20814-3998.
ISSN: 0006-3495.

DT Conference; Journal

FS LIFE

LA English

REC Reference Count: 0

TI Mechanistic and kinetic studies of **saposin C** induced
vesicle fusion

SO BIOPHYSICAL JOURNAL, (JAN 2000) Vol. 78, No. 1, Part 2, pp.
PO330-PO330.
Publisher: BIOPHYSICAL SOCIETY, 9650 ROCKVILLE PIKE, BETHESDA, MD
20814-3998.
ISSN: 0006-3495.

L7 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 2001:36147 BIOSIS

DN PREV200100036147

TI Studies on the mechanism of action of **saposins**.

AU Vaccaro, A. M. (1); Ciaffoni, F. (1); Tatti, M. (1); Salvioli, R. (1)

CS (1) Laboratorio Metabolismo e Biochimica Patologica, Istituto Superiore
Sanita', Roma Italy

SO Journal of Inherited Metabolic Disease, (July, 2000) Vol. 23,
No. Supplement 1, pp. 218. print.
Meeting Info.: VIIIth International Conference on Inborn Errors of
Metabolism England, Cambridge, UK September 13-17, 2000
ISSN: 0141-8955.

DT Conference

LA English

SL English

TI Studies on the mechanism of action of **saposins**.

SO Journal of Inherited Metabolic Disease, (July, 2000) Vol. 23,
No. Supplement 1, pp. 218. print.
Meeting Info.: VIIIth International Conference on Inborn Errors of
Metabolism England, Cambridge, UK September 13-17, 2000
ISSN: 0141-8955.

IT Major Concepts
Clinical Chemistry (Allied Medical Sciences); Enzymology (Biochemistry
and Molecular Biophysics)

IT Parts, Structures, & Systems of Organisms
endosome; lysosome

IT Diseases
Gaucher disease: behavioral and mental disorders, blood and lymphatic
disease, genetic disease, metabolic disease; metachromatic
leukodystrophy: genetic disease, metabolic disease, nervous system
disease; sphingolipidoses: genetic disease, metabolic disease

IT Chemicals & Biochemicals
Sap A [**saposin A**]: mechanism of action, pharmacodynamics; Sap
C [**saposin C**]: mechanism of action, pharmacodynamics; Sap D [
saposin D]: mechanism of action, pharmacodynamics;
anionic phospholipid; glucosylceramidase;
glucosylceramide: degradation; lysosomal hydrolase: enzyme;
saposin: mechanism of action, pharmacodynamics, precursor;
sphingolipid: degradation

IT Alternate Indexing
Gaucher's Disease (MeSH); Leukodystrophy, Metachromatic (MeSH);
Sphingolipidoses (MeSH)

L7 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 2000:137098 BIOSIS
 DN PREV200000137098
 TI Mechanistic and kinetic studies of **saposin C** induced
vesicle fusion.
 AU Qi, Xiaoyang (1); Grabowski, G. A. (1)
 CS (1) Children's Hospital Research Foundation, University of Cincinnati
 College of Medicine, Cincinnati, OH, 45229 USA
 SO Biophysical Journal., (Jan., 2000) Vol. 78, No. 1 Part 2, pp.
 57A.
 Meeting Info.: 44th Annual Meeting of the Biophysical Society. New
 Orleans, Louisiana, USA February 12-16, 2000
 ISSN: 0006-3495.
 DT Conference
 LA English
 SL English
 TI Mechanistic and kinetic studies of **saposin C** induced
vesicle fusion.
 SO Biophysical Journal., (Jan., 2000) Vol. 78, No. 1 Part 2, pp.
 57A.
 Meeting Info.: 44th Annual Meeting of the Biophysical Society. New
 Orleans, Louisiana, USA February 12-16, 2000
 ISSN: 0006-3495.
 IT Major Concepts
 Biochemistry and Molecular Biophysics; Membranes (Cell Biology);
 Methods and Techniques
 IT Chemicals & Biochemicals
 lipid vesicles; lipids; liposomes; **saposin C**
 IT Methods & Equipment
 electron microscopy: microscopy method, microscopy: CB, microscopy: CT
 IT Miscellaneous Descriptors
 membrane fusion; **saposin C**-induced **vesicle**
 fusion: kinetic studies, mechanistic studies; Meeting Abstract
 RN 113914-35-5 (**SAPOSIN C**)